m 118533

Start Time: Oven Temperature: Finish Time:

NCR:	Yes	/	No

NCR: Y	'es	/ No				V	VORK	ORDER NON-C	ON	<b>IFORN</b>	NANCE / UF	PDATE				
														QA Closed:	Date	
Nork Orde	r:							DISPOSITION				AGAIN	ST DE	PARTMENT	PROCESS	
Part N	-							Rework Scrap Use-as-is		ľ	Skid-tube Machining noforming	Crosstu Small F Finishi	ab	1	Water Jet d. Eng. Coor. e/Packaging	Engineering Quality Other
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Cause		Date	Step	Qty		or N	lon-cor	nformance,	Ch	ief Eng	Des	cription		Date	Verification	QC Inspector
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Landi	_				Г			General .		Grain				Ovalized	Г	Pressure/Forced
	-	Bending	. 6		_ <u> </u>		end		-				-	Over/Under	toloranco	Temperature/Cure
	-	Centre No	ot Concer	ntric to	0/5	_	DM/Ro		-	Hardwa	re on Incomplete			Part Incorre		Weld
	-	Cracks	C		<u> </u>		- 1	Damaged	-	1	ions Incomplete	/Unclear	$\vdash$	Part Lost/Mi	<u> </u>	Wrong Stock Pulled
		Crushed/0	rimpea.		}-		irrs Intamin	ation	$\vdash$	Mainte		e) Officieal	<u> </u>	Part Moved	1331116	
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		Ripples III Torque W		vtrucio	, F	_	rawing		$\vdash$	1	Calibration					
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	_	Wave/Tw	•		}	_	olio			4	Dimensions					
	1	** G 4 C/ 1 W	ist iii Tuk	<i>-</i> -			,			10000						

DQA: \_\_\_\_\_ Date: \_\_\_\_

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

## Work Order ID 100059

April-17-13 1:07 05 PM

\*100059\*

Item ID: D4006-041 Accept \*N900040100\* Setup Start **Revision ID:** Item Name: Tank Top Support Assembly Start Date: 4/17/13 Start Qty: 6.00 **Cust Item ID:** Required Date: 5/01/13 **Req'd Qty:** 6.00 **Customer:** Reference: Run Approvals: **Process Plan:** Date: Tooling: Date: Stop Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Accept Reject Reject Insp. Work Center ID Description **Run Hours** Code Qty Qty Number Stamp 130 QC3- Inspect Part Finish 0.00 \*130\* 5x 6 N 05/00 OC 0.00 Memo Quality Control 140 0.00 \*140\* HandFinish 0.00 Memo 1- Apply glue and install Foam as per dwg 3M 1300L Batch M 124 29 7 Hand Finishing 2- Install anchor nuts as per dwg 150 QC5- Inspect part completeness to step on W/O \*150\* OC Memo **Quality Control** 

NCR: Y	es / No				WOR	K ORDER NON-C	CONFC	)RN	MANCE / UPD	DATE	QA Closed:	Date	:
Work Orde	r:					DISPOSITION	1				EPARTMENT,	<u> </u>	Engineering
Part No				<u> </u>	Wo	Rework Scrap Use-as-is ork Order Update	TH	l nerm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite		d. Eng. Coor. e/Packaging Supplier	Quality Other
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Root						work order update	Initia	- 1	i		Date	Verification	QC Inspector
Cause	Date	Step	Qty		or Non-co	onformance	Chief I	Eng	Descri	iption	Date	verincation	QC IIISPECTOI
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Unapproved		1	<u></u>				AULT C	ATE	CORY			<u> </u>	
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-	Bending			- /-	Bend		$\vdash$			<u> </u>	Over/Under	tolorance	Temperature/Cure
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-	Cracks				<b>⊣</b> ∫	/Damaged	<del></del>	•	ion Incomplete	la elecar	Part Lost/M	}	Wrong Stock Pulled
-	Crushed/	Crimped	-	<u> </u>	Burrs		$\vdash$		tions Incomplete/U	Inclear	Part Moved	issilig [	
-	Cuffs			<u> </u>	Contami		$\vdash$		enance	_	<del>-</del>	<b>A</b> (	
	Heat Trea			_	Counte		$\vdash$	slabe		-	Positioned \	· -	Jothan
-	Inspectio		Tube	<u> </u>	Cut Too			sreac	đ	<u>L</u>	Power Loss/	Surge [	Other
-	Ripples ir			<u> </u>	Drill Ho		Off						
1	Torque W			า  _	Drawing	B	$\vdash$		Calibration				
L	Turning S			<u> </u>	Finish				Sequence		<u> </u>		
	Wave/Tw	vist in Tu	be		Folio		Ou	tside	Dimensions				

DQA:

Date:

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

## Work Order ID 100059 \*\*\* \* \*\*\* \*100059\*

April-17-13 1:07:05 PAI

\*N900040100\*

Setup Start

Revision ID: Item Name:

Item ID:

Tank Top Support Assembly

Start Date:

Required Date: 5/01/13

4/17/13

D4006-041

Start Qty: 6.00 Req'd Qty: 6.00

Cust Item ID:

**Customer:** 

Reference:

**Approvals:** 

Process Plan:

Date:

**Tooling:** 

Accept

Date:

Run

Date:

SPC (Y/N):

Set Up/

Date:

Stop

Sequence ID/ Work Center ID Operation Description

Identify as per dwg & Stock Location:

**Run Hours** 0.00

Tool ID

Tool # Plan Code

Accept Qty

Reject Qty

Reject Number Stamp

Insp.

\*160\*

Packaging Packaging

51242 Memo

0.00

170

160

\*170\*

Quality Control

OC

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

NCR: Y	es / No				WOR	K ORDER NON-O	COP	<b>NFORN</b>	лance / UP	PDATE				
	,										QA Closed	: Da	ite:	
Maril Onda		**				DISPOSITION				AGAINST D	EPARTMENT	PROCESS		
Work Orde	r:			<del></del>		Rework	7		Skid-tube	Crosstube	7	Water Jet		Engineering
Part N	0					Scrap	1		Machining	Small Fab	Pro	od. Eng. Coor.	-	Quality
	·· <del></del>					Use-as-is	1 1		noforming	Finishing		re/Packaging	_	Other
NCR N	0.				w	ork Order Update	1		Large Fab	Composite		Supplier		
												· ·		
Root	- "				•	work order update	1	nitial		ction	Sign &			
Cause	Date	Step	Qty		or Non-c	onformance	Ch	ief Eng	Desc	cription	Date	Verificatio	n	QC Inspector
Doc/Data														
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Material														
Setup													1	
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						F	AUL	T CATE	GORY					
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	Bending				Bend		<u> </u>	Grain			Ovalized		$\vdash$	Pressure/Forced
	Centre N	ot Conce	ntric to O	/s	BOM/R			Hardwa				r tolerance	<b>——</b>	Temperature/Cure
	Cracks				Broken	/Damaged	_	4	ion Incomplete	-	Part Incorre		$\vdash$	Weld
	Crushed/	'Crimped			Burrs			Instruct	ions Incomplete	/Unclear	Part Lost/N	-		Wrong Stock Pulled
Ĺ	Cuffs			L	Contam	nation		Mainte	enance	Ļ	Part Move			
	Heat Tre	at			Counte	rsink		Mislabe	eled		Positioned	Wrong	_	
	Inspectio	n Strip in	Tube		Cut Too	Short	L	Misread	t	Ĺ	Power Loss	/Surge	Ш	Other
	Ripples in	n Bend			Drill Ho	les		Offset					<u>.                                    </u>	
ľ	Torque V	Vaves in I	Extrusion		Drawin	g		Out of 0	Calibration					
Ī	Turning S	Sequence	•		Finish			Out of 9	Sequence					
ļ	Wave/Tv	vist in Tul	be		Folio			Outside	Dimensions					

Date:

## Picklest Print

April-17-13 1.07:08 PM

Work Order ID: 100059

\*100059\*

Parent Item:

D4006-041

\*D4006-041\*

Parent Item Name: Tank Top Support Assembly

**Start Date:** 4/17/13

Required Date: 5/01/13

Start Qty: 6.00

Required Qty: 6.00

Comments:

IPP rev A 09.12.18 new issie Prelim EC verified by:DD

IPP Rev:B

10.05.03 as per ECN10-562 DD verified by:EC

IPP Rev:C 10.07.12 added type of glue DD verf:JLM

			- added type of g	iuc iji	VCII.JEJVI									
	Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch		Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
	D4006-1		Manufactured	No			100	Each	0.0000	1	6	11		·
	*D4006-1*						M101	1182	5X	**	·	13	05	07
*	D4006-3		Manufactured	No			100	Each	9.0000	2	12	01		/
~7	*D4006-3*									**		[] []	105	07
			•		Location	<u>.</u>	Loc Q	<u>)ty</u>	Loc Code					÷
					ST083			9		<del></del>		<del></del>		
	MS20470AD4-5					88439		9		_	10	<sup>∠</sup> ∕\\	_	/
		A D 4 5 ±	Purchased	No			100	Each	1,367.000		48			
	*MS20470	AD4-5^								**		f) 3	105	107
	•				Location	!	Loc Q	<u>ty</u>	Loc Code					
					GA		4	138			<i>112</i>	<del></del>		
						122452		138		_	40	<del></del>		
					ST336	122452		929					a <sup>k</sup>	3
	D4006-5		Manufactured	No		122432	140	929 Each	8.0000	1		- 01	· · · · · · · · · · · · · · · · · · ·	<i>i.</i>
	*D4006-5*		Mananactarea				140	Lacii	0.0000	**	6		3/5	ارارا
	Foam											-f-)(	3/05	101
					Location	l	Loc Q	ty	Loc Code			//	1	<i>/</i> '
					ST083			8						
						87707		8				<del>-</del> -		

NCR: Y	es / No				WOR	K ORDER NON-C	CONFO	RMANCE /	UPDATE		QA Closed:	Da	ite:	
Work Orde	er:					<b>DISPOSITION</b> Rework		Skid-tube	AGA	<b></b>	PARTMENT	<b>PROCESS</b> Water Jet		Engineering
Part N		· · · · · · · · · · · · · · · · · · ·			Wo	Scrap Use-as-is ork Order Update	The	Machining rmoforming Large Fab	Smal	II Fab shing		d. Eng. Coor. e/Packaging Supplier		Quality Other
Root				Descrip	otion of v	vork order update	Initial		Action		Sign &			
Cause	Date	Step	Qty	C	or Non-cç	onformance	Chief Er	ng l	Description		Date	Verification	on	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved														·
							AULT CA	regory						
Landi	Cracks Crushed Cuffs Heat Tri Inspecti Ripples Torque Turning	Not Conce I/Crimped eat on Strip ir	Tube Extrusio		Bend BOM/Re Broken/ Burrs Contami Counter Cut Too Drill Hol Drawing Finish	'Damaged nation rsink Short les	Instr Main Misla Misro Offse Out o	ware ection Incomple uctions Incomp ntenance abeled ead	lete/Unclear		Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned N Power Loss/	ct issing Vrong		Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other

DQA:

Date:

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

## Picklist Print

April-17-13 1:07.08 PM

Work Order ID: 100059

Parent Item:

D4006-041

Parent Item Name: Tank Top Support Assembly

\*100059\* \*D4006-041\*

**Start Date:** 4/17/13

Required Date: 5/01/13

Start Qty: 6.00

Required Qty: 6.00

MS20426AD3-4

Purchased

Purchased

No

No

140 Each 22.227.00

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\*MS20426AD3-4\* RIVET

Location	1	Loc Qty	Loc Code
ST333		227	
	123021	131	
	123352	96	
ST334		8000	
	123164	8000	
ST505		8000	
	124814	8000	
ST509		6000	
	124586	6000	
		140 E	ach 59.0000

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\*MS21059I 4\*

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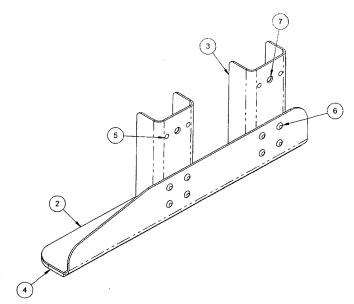
MS21059L4

<b>Location</b>	Loc Oty	Loc Code
ST316	59	
122441	6	
123900	15	
124580	38	

									DQA:	Date:	£
NCR: Y	es / No			WOF	RK ORDER NON-C	ONFOR	MANCE / UP	PDATE	QA Closed:		
Work Orde	r·				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part N					Rework Scrap Use-as-is	Ther	Skid-tube Machining moforming	Crosstube Small Fab Finishing	4	Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR N	o			\ \ \	ork Order Update		Large Fab	Composite	]	Supplier	
Root				Description of	work order update	Initial	A	ction	Sign &		
Cause	Date	Step	Qty	or Non-c	onformance	Chief En	g Des	cription	Date	Verification	QC Inspector
Doc/Data quip/Tooling											
Operator Material	-										
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rocess										AAA	
upplier										<u> </u>	
raining Inapproved	'										
					F/	<b>AULT CAT</b>	EGORY				
Landir	ng Gear			-	General	<del></del> 1		_	7	_	ı
	Bending			Bend		Grain			Ovalized		Pressure/Forced Temperature/Cure
}	<del></del>	Not Conce	entric to (	<b>——</b>	Route /Damaged	Hardv	rare ction Incomplete		Over/Under Part Incorre	<del></del>	Weld
}	Cracks	I/Crimped		Burrs	i/Damageu	· ·	ctions incomplete	/Unclear	Part Lost/M	<u> </u>	Wrong Stock Pulled
ŀ	Cuffs	, ci ilipeu	٠.	Contam	ination	$\vdash$	tenance	,	Part Moved		<b>-</b>
Ì	Heat Tre	eat		Counte		Mislal	peled		Positioned	Wrong	<b>-</b>
Ţ	<b>├</b>				Short	Misre	ad		Power Loss,	/Surge	Other
	Ripples	in Bend		Drill H	oles	Offset					
[		Waves in			ng		Calibration				
		Sequence		Finish		$\vdash$	Sequence				
	Wave/T	wist in Tu	be	Folio		Outsid	de Dimensions				

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

2	STEM No.	QTY. -041	PART NUMBER	DESCRIPTION	JOHN CAMERON AVIATION PART NUMBER
	1	X	D4065-041	TANK TOP SUPPORT ASSEMBLY	JCA-M47-2-01
	2	1 .	D4006-1	ANGLE	
Э	3	. 2	D4006-3	CHANNEL	
	4	1	D4006-5	: FOAM	
	5	4	MS20426AD3(-4)	RIVET	
	6	8	MS20470AD4(-5)	RIVET	
	7	2	MS21059-4	ANCHOR NUT	



**D4006-041 TANK TOP SUPPORT ASSEMBLY** 

1 118 775.0 COGGROUPED COPY 32" CT TO AMENDMENT HARLES CONTRACTOR 100059 MCJ 1304-17

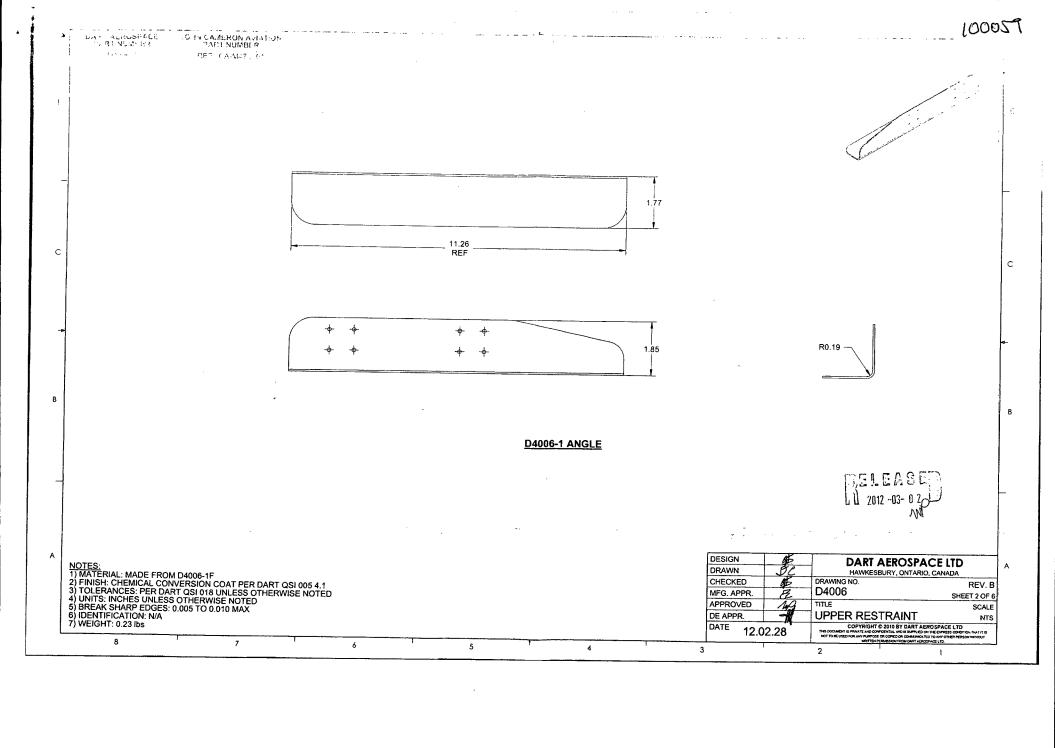
В

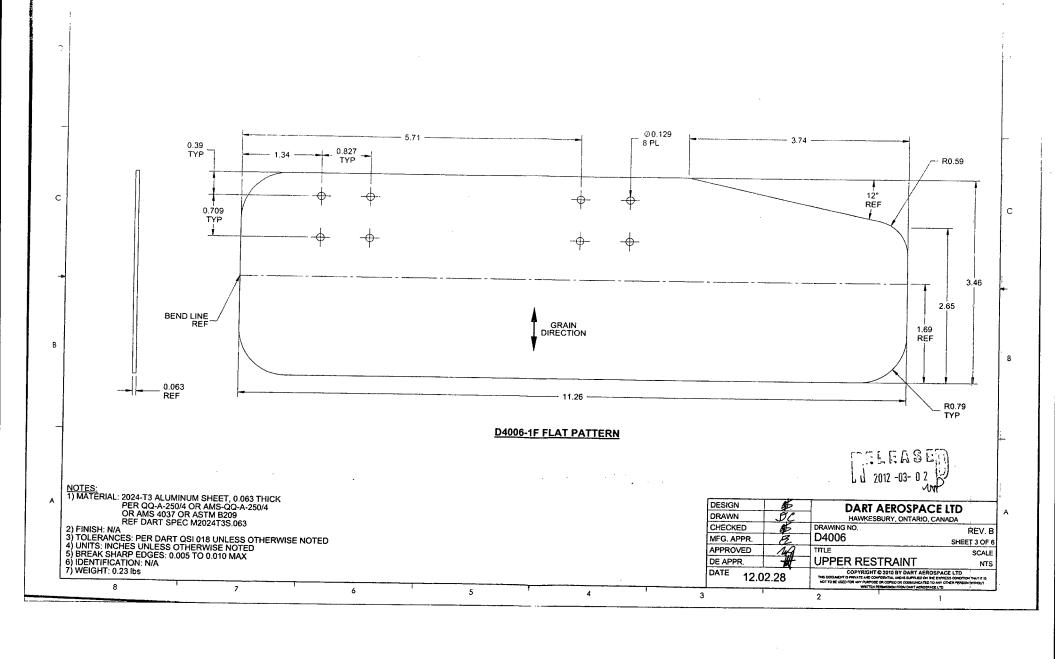
В	CHANGE "ANSI 61	POWDER C	OAT FROM "GREY SANDTEX" TO A7-1.	DC	12.02.28
Α	NEW ISS	JΕ		1	10.02.05
REV.			DESCRIPTION	BY	DATE
DESIG DRAW		DC.	DART AEROSP HAWKESBURY, ONTAK		
CHECK		色	DRAWING NO. D4006		REV. E
APPRO DE API		19	UPPER RESTRAINT		SCALE NTS
DATE	12.02	2.28	COPYRIGHT @ 2010 BY DART THIS DOCUMENT IS PRIVATE AND COMPOSITION, AND IS SUPPLINGT TO BE USED FOR ANY PURPOSES OR COMMUNICATION PRIVACES ON PRIVACE OF THE	ED ON THE EXPRESS CATED TO ANY DTH	CONOTION THAT IT IS

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NOTES:
1) MATERIAL: N/A
2) FINISH: POWDER COAT "ANSI 61 GREY" (4.3.5.15) PER DART QSI 005 4.3
BEFORE INSTALLATION OF D4006-5 FOAM AND MS21059-4 ANCHOR NUTS
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
7) WEIGHT: 0.48 lbs

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3.90 REF <del>-</del> <del>-</del>

1.06 ----

**D4006-3 CHANNEL** 

NOTES:
1) MATERIAL: MADE FROM D4006-3F
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.08 lbs

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TANKATROSFACE LET NUMBER

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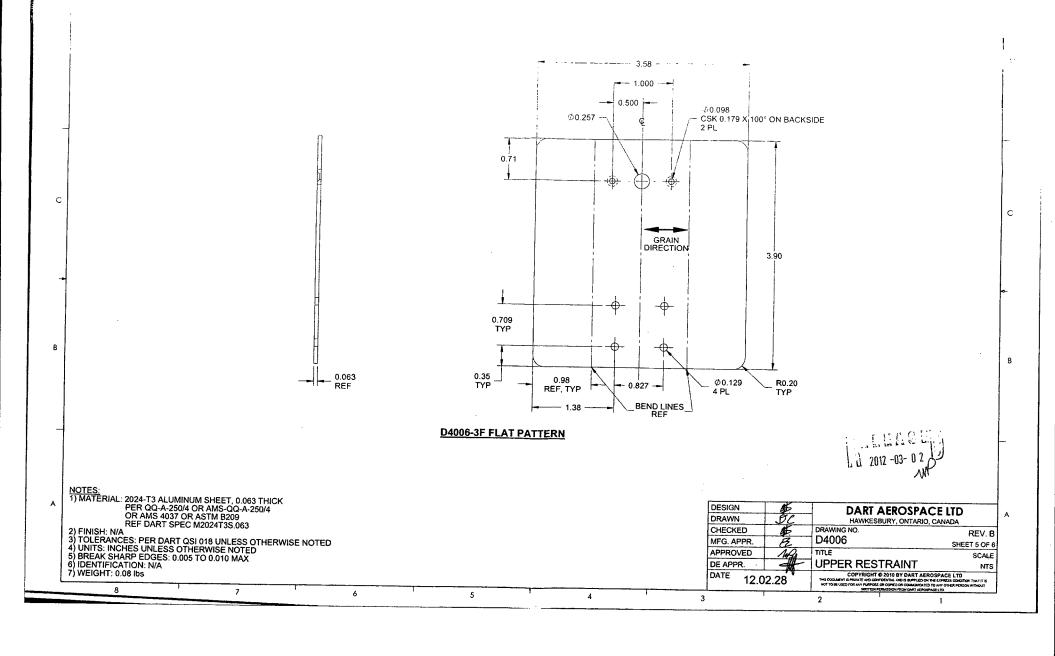
5

DESIGN	4	DART AEROSPAC	FITD
DRAWN	DC	HAWKESBURY, ONTARIO, O	
CHECKED	4	DRAWING NO.	REV. B
MFG. APPR.	己	D4006	SHEET 4 OF 6
APPROVED	149	TITLE	SCALE
DE APPR.	#	UPPER RESTRAINT	NTS
DATE 12.0	2.28	COPYRIGHT © 2010 BY DART AERO: THIS COCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE MOT TO BE USED FOR ANY PURPOSE OR COPYED ON COMMUNICATED TO	EXPRESS CONDITION THAT IT IS

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1.52 R0.79 TYP

**D4006-5 FOAM** 

NOTES:
1) MATERIAL: BLACK NEOPRENE/EPDM/SBR BLEND SHEET, 0.125 THICK
PER ASTM D 1056 GRADE 2A1 OR SAE J-18 GRADE 2A1
REF DART SPEC M-4111N-S.125
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
A COLOR OF THE PART OF ONLESS OF HERWISE NOTED

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4) UNITS: INCHES UNLESS OTHERWISE NOTED 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX 6) IDENTIFICATION: I/A 7) WEIGHT: 0.08 lbs

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DESIGN	8	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DC		
CHECKED	<b>\$</b>	DRAWING NO.	REV. E
MFG. APPR.	B	7 D4006	SHEET 6 OF 6
APPROVED	149	TITLE	SCALE
DE APPR.	#	UPPER RESTRAINT	NTS
DATE 12.02.28		COPYRIGHT © 2010 BY DART AEROSPACE LTD nes doculater is prevait nes confedental and is supplied on the corresponding hybrid is not to be used for any fundoss or consultant to to any other reason without.	

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